Running head: READINESS EVALUATION OF PROFIS/FORSCOM NURSES
A Readiness Evaluation of Professional Filler System and Forces Command Nurses at Darnall
Army Community Hospital, Fort Hood, Texas
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award of a Master's Degree in Health Administration

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14. ABSTRACT

The purpose of this study is to apply a psychometric tool for readiness assessment, the Readiness Estimate and Deployability Index (READI), to Army Nurse Corps (ANC) officers assigned to U.S. Army MEDDAC, Fort Hood, Texas. Because of increases in the number and duration of deployment missions, Army leadership needs to ensure that ANC officers are prepared to perform skills and functions critical to patient care in a field environment. The READI is a survey questionnaire of self-reported competencies and behaviors based on six dimensions of readiness: clinical nursing competency, operational competency, survival skills, personal and psychological readiness, leadership and administrative support, and group integration and identification. Convenience samples of 97 active duty MEDCOM non-Professional Filler System (PROFIS) nurses and 50 active duty PROFIS/ Forces Command (FORSCOM) nurses assigned to Darnall Army Community Hospital participated by completing the instrument. Results for this application were tested for internal consistency of item responses and assessed by Cronbachs coefficient alpha. The findings offer evidence for the expanded application of the READI model to differing ANC populations to provide meaningful and consistent assessments of readiness. Comparative results were summarized by a series of newly developed graphic panoramic displays (GPDs). Findings from this study provide definitive evidence for the utility of GPD comparisons of cohort groups to identify readiness differences between the groups and provide detailed indicators in formulating readiness forecasts and training needs in preparation for future deployments.

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Abstract

The purpose of this study is to apply a psychometric tool for readiness assessment, the Readiness Estimate and Deployability Index (READI), to Army Nurse Corps (ANC) officers assigned to U.S. Army MEDDAC, Fort Hood, Texas. Because of increases in the number and duration of deployment missions, Army leadership needs to ensure that ANC officers are prepared to perform skills and functions critical to patient care in a field environment. The READI is a survey questionnaire of self-reported competencies and behaviors based on six dimensions of readiness: clinical nursing competency, operational competency, survival skills, personal and psychological readiness, leadership and administrative support, and group integration and identification. Convenience samples of 97 active duty MEDCOM non-Professional Filler System (PROFIS) nurses and 50 active duty PROFIS/ Forces Command (FORSCOM) nurses assigned to Darnall Army Community Hospital participated by completing the instrument. Results for this application were tested for internal consistency of item responses and assessed by Cronbach's coefficient alpha. The findings offer evidence for the expanded application of the READI model to differing ANC populations to provide meaningful and consistent assessments of readiness. Comparative results were summarized by a series of newly developed graphic panoramic displays (GPDs). Findings from this study provide definitive evidence for the utility of GPD comparisons of cohort groups to identify readiness differences between the groups and provide detailed indicators in formulating readiness forecasts and training needs in preparation for future deployments.

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Introduction

The United States Army has evolved a policy of individual replacement and manning to medical units over the past 35 years. Unit level assessment and reporting is well developed using the Status of Resources and Training System (SORTS), but it lacks the ability to forecast declines in readiness or accurately assess individual readiness. A GAO report on military readiness identified erroneously high unit status reports and specified several drawbacks to the system. Specifically, it noted that there was no long-term emphasis on readiness, only on achieving the highest rating for each term regardless of the future downstream costs. The report also noted "insufficient indicators to ensure a comprehensive assessment". These same deficiencies and recommendation to SORTS were echoed in testimony before Congress by Mark Gebicke, Director of Military Operations and Capabilities Issues, National Security and International Affairs Division. Mr. Gebicke made note that while the Army in particular had made strides toward answering the shortfalls of SORTS, the ability to integrate that system with other data sources to provide a more time appropriate readiness sensitive instrument would be "years to come" (United States General Accounting Office (1997).

Many measures of initial competence are taken and recorded in the development of Army nurses. Educational and practical skills are verified with initial licensure. Military operational and leadership skills are developed and assessed at formal military courses. The weakness in the individual assessment process occurs when we attempt to make continual assessments of proficiency. Civilian professional associations such as the American Nurses' Association have recently revisited this issue in an attempt to address public and governmental requests for measures of quality at all levels of professional practice.

Nurses have expanded their scope of practice from supporting caregivers to independent d practitioners. This advancement brings with it the requirement to evaluate quality or

licensed practitioners. This advancement brings with it the requirement to evaluate quality or readiness on an ongoing basis. (Whittaker, Carson & Smolenski, 2000). Attempts to construct competency-based tools are demonstrated by the Competency Outcomes and Performance Assessment (COPA) Model developed by Dr. Carrie Lenburg (Lenburg, 2000) and the University of Colorado School of Nursing (CU-SON) example of identifying curriculum competencies in nursing education (Redman, R.W., Lenburg, C.B., Walker, P.H., 1999).

The Readiness Estimate And Deployability Index (READI) provides a valid and reliable

The Readiness Estimate And Deployability Index (READI) provides a valid and reliable mechanism to quickly and accurately assess the readiness of U.S. Army Nurses in six dimensions of competence. Darnall Army Community Hospital has designated 53 nurses in the Army Professional Filler System (PROFIS) to fill positions in 8 different medical units. The 21st Combat Support Hospital (CSH), Fort Hood, Texas provides 16 FORSCOM nurses to Darnall in order to provide the clinical environment necessary to maintain their clinical nursing skills. The ability to quickly assess and monitor readiness of individuals designated to occupy these positions greatly enhances the command's ability to make informed personnel decisions for deployment.

Conditions Which Prompted the Study

The READI was developed as an assessment tool to be used at the individual level and applied in a unit setting. To date, the instrument has been evaluated through several tests for validity, reliability and general inspection of results. Groups sampled to date have been predominately generic samples of academic groups. These groups have lacked the "unit element" of the intended population. This graduate management project seeks to apply the READI in its intended environment with its intended audience.

Statement of the Problem

Do non-PROFIS nurses and Darnall Army Community Hospital PROFIS/FORSCOM nurses report differing competency in the perishable skills critical to Army nursing deployment? Training opportunities are very different for these two groups. Using one of the elements of the laws of learning, recency is applicable in the sustainment of critical perishable skills (Thornton, 1913). To maintain licensure, many professions require sustainment training, such as the completion of continuing education courses or periodic practical examinations. No one measure currently encompasses all six dimensions — clinical nursing competency, operational competency, soldier/survival skills, physical/psychosocial/personal readiness, leadership and administrative support, and group integration and identification assessed in the READI.

Literature Review

Today, Army Medical Department (AMEDD) personnel face a wide variety of missions. In addition to caring for service members and other eligible beneficiaries during peacetime, medical units must train and prepare to support deployed forces around the world. Medical units have typically focused training on supporting conventional warfare operations, where emphasis is placed on rapid triage, resuscitation, stabilization, and evacuation. However, in recent years many medical deployments are supporting military operations other than war, such as peacekeeping, humanitarian assistance, and disaster relief (West & Clark, 1995; Crutcher, Beecham, & Laxter, 1995; Haal, Cipriano, & Bicknell, 1997; Hughes, Jerant, Epperly, & Marionneaux, 1997; Hohner, & Jones, 1998; Rumbaugh, 1998; and Silverman, Barnes, & Zlamai, 1998). Although there have been elements of combat risk in these missions, logistical support and community health needs have become equally important (Baker & Ryals, 1999a/b).

Given the increased frequency of military operations other than war, Army Nurse Corps (ANC) officers face greater opportunities to be deployed today and in the foreseeable future. Nurses need to periodically assess their individual readiness to ensure that they are prepared, should they be called on to deploy in support of any of a wide range of missions. Although 76% of Army nurses are assigned to fixed-facility hospitals, with computerized and automated equipment, their primary mission is to be prepared to support deployed forces during military operations. Prior to Operation Desert Shield/Desert Storm, it was believed that everyday clinical experience in medical treatment facilities (MTFs) prepared nurses to provide care when deployed (Zadinsky, 1996). However, according to testimony before a congressional subcommittee, it was discovered during Operation Desert Storm that "many doctors and nurses had not participated in field training and were not familiar with their unit's mission or ... supplies and equipment in the field hospital" (U.S. General Accounting Office, 1992). In a report Colonel William Smith filed as Commander of the 31st Combat Support Hospital at the close of the hospital's redeployment from the Gulf Conflict, he related that one critical shortcoming in training of personnel deployed with this unit was lack of familiarity with Deployable Medical Systems (DEPMEDS) to include planning, movement, and strategic deployment of the system. This particular skill was critical at all levels of planning, and its absence was evident among all ranks. The AMEDD continues to identify this skill as critical to mission success; yet, as evidenced by this study, both groups were less than proficient at this skill. Similarly, the use of field ventilators was reported to be frequent and a success in the delivery of healthcare in combat in 1991, although many lacked familiarity with the equipment due to few training opportunities. This graduate management project demonstrates that proficiency in this skill is still lacking. In support of training as measured by all six modules of

the READI, COL Smith commented "Many of these problems were self-inflicted due to unfamiliarity with equipment and the tasks required in the field environment" (Smith and Lisagor, 1992).

The lessons of medical experiences in the Gulf have also been discussed by Newman and France (1998) and recently revisited by Bell, Amoroso, & Williams (2000); both sources underscore the vital and crucial role of readiness in deployment.

Shortly after the Gulf War experience, the senior leadership of the ANC recognized that there existed a need for readiness training at all levels (Reineck, 1998, 1999a/b). Zadinsky (1996) reported that most nurses displayed a need for more training in subjects such as use of field medical equipment and evacuation, skills that are not part of the daily operations of MTFs. Zadinsky also noted that many nurses believed that they did not have the opportunity to practice and become proficient in tasks that they would be required to perform when deployed.

The AMEDD responded to the renewed focus on readiness by establishing the Defense Medical Readiness Training Institute which prepares tri-service medical personnel for future operations with training programs such as the Combat Casualty Care Course, Combined Humanitarian Assistance Readiness Training, and the Joint Trauma Training Center (Defense Medical Readiness Training Institute, 2000). The Readiness Training Program for Nursing Personnel was implemented to enhance competencies in those nursing skills used in the field environment, as well as in battle-focused settings (Army Nurse Corps, 2000). Specific concerns for readiness issues pertaining to reserve component nurses as well as active-duty ANC personnel have also been recognized (Dybel & Seymour, 1997).

A critical readiness mission assigned to the Army Medical Department is administration of PROFIS as it pertains to AMEDD Officers. This program is managed by Army Medical

Command (MEDCOM) under direction of The Army Surgeon General. The system designates qualified personnel assigned to Tables of Distribution and Allowances (TDA) units to fill early deploying Tables of Organization and Equipment (TO&E) units. Nursing positions make up a significant portion of those personnel are tasked to fill in forward deployed units. Guidance on training to meet the level of readiness required in such units is developed by the Army Medical Command. The responsibility for maintaining this standard of readiness is shared between the providing and the receiving unit. The providing unit trains and evaluates individual tasks. The collective tasks are then trained and assessed by the receiving units on a periodic basis throughout the training year (Department of the Army, 1995).

Military operational readiness is defined as "the capability of a unit/formation, ship, weapon, or equipment to perform the missions or functions for which it is organized or designed" (Periscope, 2000). Zadinsky (1996) defined military nursing readiness as the "ability of nursing personnel to perform skills and functions critical to their patient care role in a deployed or field status." It is measured in terms of individual competency, which can range from knowing how to do a skill very well to not knowing how to do it at all. In order to clarify the concept of individual U.S. Army nursing readiness, Reineck (1999b) conducted a nursing focus group study that defined individual nursing readiness as "a dynamic concept with dimensions at individual, group and system levels, which, together, influence one's ability to prepare to accomplish the mission." Six dimensions of individual military nursing readiness were identified: clinical nursing competency, operational nursing competency, soldier survival skills, personal/psychological/physical readiness, leadership and administrative support, and group integration and identification.

Based on these six dimensions of individual readiness, Reineck, Finstuen, Connelly, and

Murdock (2001) developed the READI, funded by the Henry M. Jackson Foundation for the Advancement of Military Medicine and the Tri-Service Nursing Research Program (Reineck, 2000a, Final Report). Results of this initial pilot study were presented at the 10th Annual Asia-Pacific Military Medicine Conference in Singapore (Reineck, 2000b). The index consists of 61scaled-attitude questions that assess self-reported readiness competencies in each of six dimensions of readiness identified by the nursing focus group. In subsequent field trials, the READI was administered to three groups of Army nurses (total=93) representing both TDA and TOE units and was found to provide valid and reliable measures of individual nursing readiness. Comparative results from these trials were presented at the Association of Military Surgeons of the U.S., Karen A. Reider 13th Annual Nursing Research Poster Session (Reineck, Connelly, Finstuen, & Murdock, 2000a).

In initial field trials, READI results were found to be consistent; however, 74 of 93 nurses (83%) who participated in that initial application of the instrument were in the grade of captain. Because this is not representative of the active-duty ANC population, of which only 31% are in the grade of captain, the question was posed as to whether the READI would provide meaningful results when administered to other cohort groups, such as new ANC officers; and, if so, what would the readiness competencies of these new ANC officers be? Kovats and Morris (2000, 2001) studied a cross-sectional sample of 118 OBC students, predominantly nurses with the rank of lieutenant, and compared their READI profiles to previous field trial profiles. Further research applying the READI was conducted measuring differences between active and reserve component nurses (Kovats, Morris, Reineck & Finstuen, 2001) They found the READI to have similar levels of rating reliability and psychometric properties across all nurses sampled. They

concluded that the READI is applicable to diverse populations of all active duty ANC. Followon studies have further replicated the reliability results in past studies (Reineck, Finstuen, Connelly & Murdock, 2002)

Further research by the Air Force using the READI as a component of a multi-test construct combining a revised READI, Derogatis Affects Balance Scale (DABS) and Brief Symptom Inventory-18 (BSI-18) supports the acceptance of the READI as a valid and operationally useful tool in providing assessments of nursing competencies (Dremsa, Braun, Resnick, Derogatis, Turner & McEntee, 2002).

Purpose (Variables/Hypothesis).

The purpose of the study is to measure differences in competencies of Army non-PROFIS nurses in the current READI data pool and Darnall Army Community Hospital PROFIS/FORSCOM nurses. The working alternate hypothesis is that PROFIS/FORSCOM nurses at Darnall Army Community Hospital, due to recency and frequency of training (Thorndike, 1913), will self-assess a higher competency in the scaled items of sections one through three of the READI; the null hypothesis is there will be no difference in competency between groups. The objective of the study is to report those tasks and skills in which nurses self-assess themselves as low in competency. This report in turn will inform Darnall Army Community Hospital nursing leadership of potential deficiencies so that training can be provided.

Method

Sample and Procedures

Data collection was conducted by direct sample of PROFIS/FORSCOM nurses assigned to Darnall Army Community Hospital. These nurses assigned to PROFIS positions are required to participate in a minimum of five days of training a year with their assigned units. Common Task Training and the opportunity for weapons qualification are provided by the Department of Readiness Evaluation Training and Security, within Darnall Army Community Hospital. FORSCOM nurses are assigned to the 21st Combat Support Hospital (CSH) with clinical duties in Darnall Army Community Hospital. All training requirements for this group are provided by the 21st CSH.

Screening for those nurses who had previously taken the READI was conducted at the time of survey to ensure no duplication of results. An explanation of the process for maintaining confidentiality was distributed with the survey, which took approximately 20 minutes to complete.

Analysis and Statistical Procedures

Data items were coded and entered into the Statistical Package for the Social Sciences data analysis program (SPSS version 10.0.5). Data entries were checked and rechecked to ensure data quality. Scaled-attitude items were grouped by readiness dimension. Inter-item reliability was computed using Cronbach's alpha. Descriptive statistics were calculated and visually summarized in a series of graphic panoramic displays. Missing responses were replaced with the serial mean for the respective response. Inferential statistical tests were conducted using the Analysis of variance (ANOVA).

Results

Initial Analysis

Demographic characteristics of the groups are presented in Table 1. Of the sample of 97 MEDCOM non-PROFIS nurses, most (87.6%) were assigned to TDA units and held the rank of lieutenant (75.2%). The sample mirrors the army nurse population with regard to gender; twothirds sampled were female. The predominant specialty was still medical-surgical nursing (80.4%) and the group had an average of 2.14 years of nursing experience. By comparison, the Darnall PROFIS/FORSCOM group reported a more normal distribution by rank, with 16% reporting the rank of lieutenant, 48% the rank of captain, 28% the rank of major, and 10% the rank of lieutenant colonel. The groups were identical with respect to gender distribution. The nursing specialty was still predominantly medical surgical (36%), but all other specialties were generally evenly represented, with critical care, perioperative, and nurse practitioner specialties representing 12% each. The Darnall nurses reported an average of 6.9 years of nursing experience.

Reliability of READI item ratings

Reliability was assessed using Cronbach's alpha for the three evaluated sections of the READI. As in previous applications, the instrument performed reliably in this survey. Section one, operational nursing, returned an alpha value of .96; section two, clinical nursing, returned an alpha value of .86; and soldier skills nursing returned an alpha value of .88. These values are higher than in previous applications of the instrument and provide continued evidence that average ratings of the READI are consistent, stable, and, most importantly, meaningful, as the READI is applied to an expanding environment of army nurses.

Item descriptive statistics and graphic panoramic displays

Figures 1 through 4 display computed item averages and standard deviations for the READI ratings of both nursing groups. At the top of each figure is a graphic, panoramic display which depicts a comparison of group-average-rating-profiles across specific READI items. Indexed on the vertical axis, competency ratings could range from a low of 1 to a high of 5. Overall, average competency ratings for both groups of nurses fell between 1.7 and 4.4, with item standard deviations of an average of one scale point.

Clinical Nursing Competency

Figures 1 and 2 show moderate to high degrees of competency in instituting standing orders, completing a nursing assessment and interpreting abnormal findings, identifying components of the physical exam, and airway management. Lower competencies were reported in caring for patients with nuclear, chemical, or biological injuries and in using a field ventilator. Rating profiles for Darnall nurses were generally three quarters of a scaled point higher than were those for MEDCOM, non-PROFIS nurses.

Operational Nursing Competency

Competence in field sanitation and the procedures for reporting unlawful acts were reported as high (see Fig. 3). Lower competencies were reported on knowledge of evacuation procedures and in obtaining 12-lead EKGs. The lowest rating for MEDCOM, non-PROFIS nurses continues to be DEPMEDS proficiency. Darnall nurses rated moderate competency in this task. Again, Darnall nurses were three quarters of a scaled point higher than MEDCOM non-PROFIS nurses.

Soldier Survival Skills

All items in this category, depicted in Figure 4, were rated at or above a value of 3.0. Inverse competency responses, based on training and experience, were observed in familiarity with the M-16 rifle (not the weapon assigned most nurses), in the ability to navigate with a compass and in maintaining a weapon. Darnall nurses reported high competence in their familiarity with the M-9 9mm pistol (the weapon assigned most nurses), and in their ability to perform duties in adverse conditions. Overall, responses for this section, while individually variable, did not differ between groups.

Inferential Statistical Comparisons.

Three separate, unweighted means, 2 x k split-plot ANOVA comparisons were computed to test for differences in average ratings between the two nursing groups, while simultaneously testing for differences within the various k-item ratings for the dimensions of the READI survey. Table 2 displays results for each of the three READI dimensions. As shown, statistically significant differences emerged between groups on two of the three sections, with F(1, 146) = 24.29 for clinical nursing, F(1, 146) = 31.38 for operational nursing, and F(1, 146)= .67 for soldier survival skills. Notice that average profiles for PROFIS/FORSCOM nurses were higher than MEDCOM, non-PROFIS/FORSCOM ratings on the first two dimensions, but the third dimension showed no significant difference in self-assessed competencies between groups (see Figures 1 through 4 for trends). Within-subjects comparisons of items emerged as statistically significant and displayed differences in all three READI sections. These results indicated that nurses indeed differentiated among items in terms of their strength of response in making ratings. Tests for interaction were also significant for all sections (see Table 2). These

results indicated that while differences existed between the two groups, the differences were not the same across all items in sections one, two, and three.

Conclusion

Limitations of the Study

This study makes the first attempt at a local evaluation of self-assessed competency of nurses at an operational level. A significant number of the FORCOM nurses who were surveyed deployed in support of Operation Enduring Freedom during collection of this data. Nurses newly assigned to operational positions in support of this deployment had minimal unit training opportunities. This training deficit could have had an unmeasured effect on outcomes.

Discussion

The PROFIS/FORSCOM nurses were participating in an ongoing PROFIS/FORSCOM training program and exhibited higher operational competencies than did nurses of the MEDCOM, non-PROFIS group. Further, PROFIS/FORSCOM nurses that worked regularly in a fixed facility environment reported higher proficiency for clinical competencies. There was no significant difference between the two groups in these self-assessed competence with regard to soldier and survival skills.

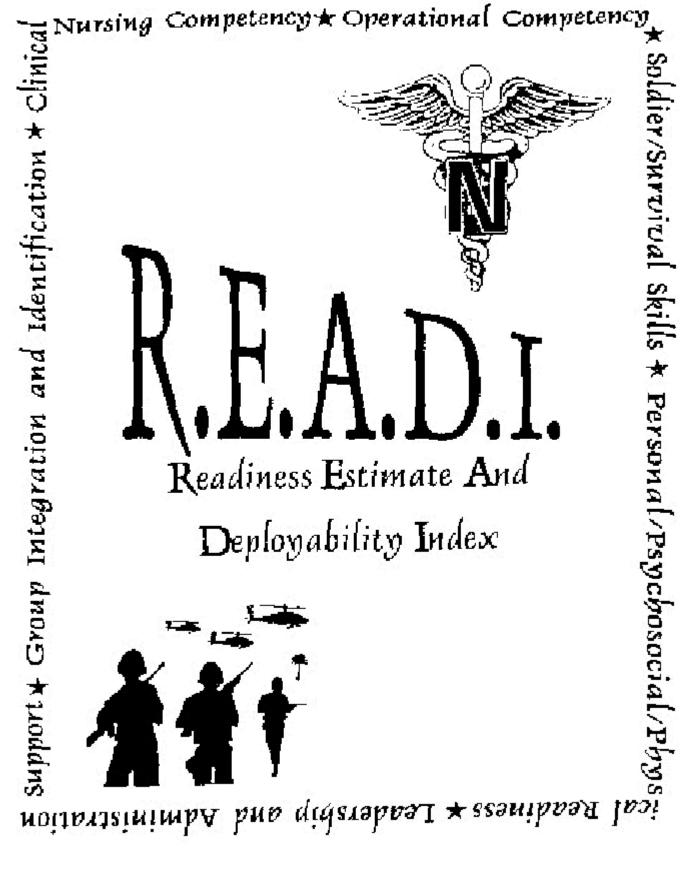
The primary benefit of this analysis is the ability to make timely and responsive changes to training at the facility level. This is particularly important because the list of nurses assigned to PROFIS/FORSCOM positions at Darnall Army Community Hospital, and other facilities, changes almost daily. Tasks critical to Army nursing can be quickly and reliably identified through use of the READI. The verified reliability of the instrument lends confidence to its use as new applications are tested. The ease of application of the instrument allows field and facility

commanders the opportunity to make strategic, as well as tactical, shifts to the training and qualification of nurses in their role as deployable providers of the Army Medical Department. Alignment of past training plans of the PROFIS/FORSCOM units and results of this study produce immediate feedback of success and validity of those plans. The possibility of use at the ward or small unit level to obtain quick, valid, reliable indicators of competency and apply these indicators to individual training is open for creative mission-oriented uses. Future applications will provide data that are trendable in yet unforeseen applications as the instrument becomes more widely used in an ever-broadening environment.

Appendix A

Readiness Estimate and Deployability Index

Nursing Competency * Operational Competency Support¥ Group Integration and Identification ★ Clinical





INTRODUCTION

Purpose of the Survey

The purpose of the READY, are (1) to raise consciousness of the extent of preparation needed for Readiness and (2) to serve as a diagnostic tool for individuals or clinical nursing unit leaders.

Background

The Readiness Estimate and Deployability Index (READI) is a questionnaire designed to estimate the preparedness of Army Nursing personnel for worldwide deployment in support of Department of Defense missions. Questions on the READI are based on expert input from nursing personnel in active and reserve components, officer and enlisted, professional fillers, company grade and field grade nursing personnel in both TDA and TOE organizations worldwide.

Scoring

The READI is an index of readiness. It is not a comprehensive assessment. Rather, it will give an initial index or estimate of the basics of readiness. The READI is a self-assessment tool to measure the richer, human dimensions of individual readiness not otherwise reported. It measures self-report of individual readiness along six dimensions.

- 1. Clinical Nursing Competency
- 2. Operational Competency
- 3. Soldier/Survival Skills
- 4. Physical/Psychosocial/Personal Readiness
- 5. Leadership and Administrative Support
- 6. Group Integration and Identification

DIRECTIONS

Read each question and select the most appropriate answer (by checkmark, circle, etc.) as indicated on the READI questionnaire. **NOTICE**: Some *questions ask you to selected more than one answer*.

Thank you for your participation and support of readiness.

R.E.A.D.I. Readiness Estimate and Deployability Index

Demographic Data

1. What is your current group? (check	cone) [] Active Component [] Army National Guard [] U.S. Army Reserve - Troop Program
Unit [] Other	m .
2. What is your area of concentration	(AOC), if an officer, or military occupational specialty
(MOS) if enlisted? (check one) [] 66C - Psychiatric Nurse [] 66E - Perioperative Nurse [] 66F - Nurse Anesthetist [] 66H00 - Medical Surgical Nurse [] 66H8A - Critical Care Nurse [] 66H8D - Nurse Midwife [] 66H8E - Nurse Practitioner 3. How many years, military and civil	[] 66H8F - Community Health Nurse [] 66H8G - OB-GYN Nurse [] 66HM5 - Emergency Nurse [] 91B - Medical Specialist [] 91C - Licensed Practical Nurse [] 91 D -Surgical Technician [] 91X - Behavioral Health Technician
you checked in question number 2 about	
	ssigned? (check one) [] USA Medical Command (Incl. Europe, Japan, and AMEDD C&S) [] USA Forces eventh Army (USAREUR) [] US Army Reserve (USAR) [] Army National Guard (ARNG) [] 8th US Army,
5. If you are assigned to USA Medica	l Command, are you professional filler (PROFIS)? (Check one) []Yes [] No []Uncertain
[] 02 1st Lieutenant [] E-4 [] 03 Captain [] E-5 [] 04 Major [] E-6 [] 05 Lieutenant Colonel [] E-7 [] 06 Colonel [] E-8	E3 Private, Private E-2, Private First Class Specialist Sergeant Staff Sergeant Sergeant First Class Master Sergeant Sergeant Major
7. Are you male or female? [] Male [] Female 8. What is your ethnic background? [] American Indian, Eskimo or Aleut American [] White [] Other	[] Asian or Pacific Islander [] African
9. Are you of Hispanic/Spanish origin	or ancestry? []Yes []No
10. To what type of unit are you assig [] TO&E Unit. A tactical unit which [] TDA Unit [] I do not know.	
11. What is your deployment status? ([] I am currently deployed [] I am not deployed but will be deployed [] I am not deployed at this time and	
12. Have you ever been deployed in y	our current AOC/MOS? []Yes []No

Section One Clinical Nursing Competency

1. How familiar are you with the	he. differen	t types of s	hock? (ch	eck one)		
Not familiar	[]1	[]2	[]3	[]4	[]5	Totally familiar
2. How competent are you in o	caring for p	atients in h	iemorrhag	ge shock? (check one)	
Not competent [] 1 []2 []	3 []4 []	5 Totally o	competent	t		
person who appears to have be placed a dressing over the woo	een hit in th and, but you	ne leg. The a noticed ye	patient is ou have to	losing a sto keep rein	eady stream forcing it.	There is ground ambulance support. There is one in of blood. The patient's vital signs are stable now. You I'he ambulance driver wants to know if the patient can . What is your assessment? (check one)
[] The patient can wait for the [] Patient has to go on the firs					volemic sho	ock
4. Check the number that repr	esents your	competen	cy with cli	inical docu	mentation	(use of SF 510,511) in a field environment.
Not competent [] 1 [] 2 []	3 []4 []	5 Totally o	competent	t		
Emergency Nursing						
1. When was the last time you [] More than 4 years ago [] Within the most recent 1-4 [] Within the last year, but mo [] Within the last 6 months	years	·	it care? (ch	neck one)		
2. What type(s) of triage experiments [] I have not learned about to [] Learned through military [] Learned through inservice [] Practiced triage in an ED [] Practiced triage in a field	riage yet or civilian es, nursing setting	courses (i.courses, jo	e. EFMB, ournals, ha	, OAC, Me andouts, et	edical Man tc	apply) agement of Chemical Casualties Course etc)
3. How competent are you to	calculate a	n IV drip v	without yo	our calcula	ator or drug	g book? (check one)
Not competent [] 1 [] 2 []	3[]4[]5	Totally co	mpetent			
4. When was the last time you [] More than 4 years ago [] Within the most recent 1-[] Within the last year, but n [] Within the last 6 months	4 years			ns, calcula	ate dosages	, and administer an IV medication? (check one)
5. How competent are you to IV fluids, administering media						sess patients? For example, ordering X-rays, starting sician? (check the number)
Not competent [] 1 [] 2 []3 []4	[] 5 Tota	lly compe	etent		
6. How competent are you to [] Not Competent (Would as [] Competent (Provided ano [] Very Competent (Could p	ssist if some ther nurse l	eone told r helped me,	ne exactly i.e. helpe	y what and ed with dru	d how to do	o it.)

7. D one)	•	cept of bo	ody surfac	ce area in 1	relation to	a burn pat	ient and are you competent in calculating it? (check
	No, Don't know what it is Heard of it before, but no						
	Know a little about it and						
	Understand it and probable		alculate i	t.			
	Understand it and can calc		ing which	critically	ill or inju	ed natient	s get seen first? (check one)
					-	ed patient	s get seen first. (cheek one)
	competent[]1 []2 []						
9. C	onsider a situation if a do	ctor is no	t present.	How com	petent are	you in per	rforming ACLS protocols? (check one)
Not	competent [] 1 [] 2 []	3 []4 []	5 Totall	y compete	nt		
10.	How competent are you t	aking care	of life th	nreatening	injuries? (check one	2)
Not	competent [] 1 [] 2 []	3 []4 [] 5 Total	ly compete	ent		
11.	Are you competent in you	ır IV skill	s? []Yes	[]No			
12.	Could you in some detail	describe t	the life-sa	ving ABC	principle	s? []Yes []No
13.	Do you feel competent to	assess a r	nultiple t	rauma pati	ient?[]Ye	es [] No	
	ck the number that indicad below.	tes your l	evel of co	ompetence	on each o	f the patie	nt situations
14.	Care of patient with NB	C injuries	S				
	Not competent at all []	1[]2[]	3[]4[]	5 Totally	competent	t	
15.	Ballistic missile injuries	3					
	Not competent at all []	I[]2[]:	3[]4[]	5 Totally	competent		
16.	Recognition of tension	pneumoth	orax				
	Not competent at all []	I []2 [] 3	8[]4[]:	5 Totally c	competent		
17.	Fluid resuscitation of a	burn patie	ent				
	Not competent at all []	1[]2[]	3[]4[]	5 Totally	competent	t	
18. J	Jniversal blood donor pro	tocol					
1	Not competent at all []	1 []2	[]3	[]4	[] 5	Totally	competent
19. I	Disease, non-battle injuries	;					
	Not competent at all	[]1	[]2	[]3	[]4	[] 5	Totally competent
20. U	Use of field ventilator						
	Not competent at all	[]I	[]2	[]3	[] 4	[] 5	Totally competent

21. Airway management								
Not competent a	nt all [] 1	[]2	[]3	[]4	[] 5	Totally competent		
22. Implementing triage categories								
Not competent a	nt all [] 1	[]2	[]3	[]4	[]5	Totally competent		
23. Clinical team leadersh	ip							
Not competent a	nt all [] 1	[]2	[]3	[]4	[]5	Totally competent		
24. Caring for refugees								
Not competent a	at all [] 1	[]2	[]3	[]4	[]5	Totally competent		
25. Antepartum/postpart	um care							
Not competent a	nt all [] 1	[]2	[]3	[]4	[] 5	Totally competent		
26. Field infection control	1							
Not competent a	at all [] 1	[]2	[]3	[]4	[] 5	Totally competent		
27. Orthopedic nursing								
Not competent a	nt all [] 1	[]2	[]3	[]4	[] 5	Totally competent		
28. Neurologic nursing								
Not competent a	nt all [] 1	[]2	[]3	[]4	[]5	Totally competent		
Physical Assessment								
Please rate according to	Level of Preser	nt Knowle	dge/Skill (check the	number)			
1. Identify the componen	its of a physica	l examinat	cion					
Low	[]1	[]2	[]3	[]4	[]5		High	
2. List the five examination techniques to perform a physical examination								
Low	[]1	[]2	[]3	[]4	[]5		High	
3. Perform a complete nu	arsing assessme	ent and int	erpret abn	ormal find	ings			
Low	[]1	[]2	[]3	[]4	[]5		High	

Section Two Operational Nursing Competency

Consider this situation. The 4 limb electrodes of a cardiac monitor-recorder are attached to a patient and you have just obtained an EKG tracing in the field. You have been asked to obtain a 12 lead EKG on the patient. You have the following equipment and supplies: Field table; cardiac monitor; 4 metal limb electrodes attached to patient with holding straps; 1 suction cup electrode; 1 tube of electrode gel; 1 roll of recording paper; 1 box of alcohol pads; 1 patient on a hospital bed.

1. How competent are you to obtain a 12-lead EKG using the appropriate procedure and equipment describes above? (check one)								
Not	competent at all	[]1[]	2 []3 []4 []57	Fotally co	mpetent		
patie		e followi	ng equipi	ment and	supplies: F	Field table;	1 portable	nd need to suction oropharyngeal secretions from a coropharyngeal suction apparatus; sterile patient gloves.
	. How long can the suction apparatus operate on internal battery pack? (check one)] 2 hours [] 1 hour [] 45 minutes [] 30 minutes [] 20 minutes							
3. How many hours does it take for the internal battery pack to recharge when completely discharged? (check one) [] 8 hours [] 16 hours [] 20 hours [] 30 hours								
4. In the field medical treatment facility or ward, the mode of electrical operation for the suction apparatus is AC power source [] True [] False								
5. In the ambulance or other evacuation vehicle, the mode of electrical operation for the suction apparatus is a DC power source [] True [] False								
6. For a patient on a litter, the mode of electrical power for the suction apparatus is a DC power source. [] True [] False								
Che	ck the number th	nat indica	ites your	level of co	mpetence	in these o	perational	areas:
7. E	vacuation Proce	dures						
	Not competent	at all		[]1	[]2	[]3	[]4	[] 5 Totally competent
8. Echelon of Care								
	Not competent	at all		[]1	[]2	[]3	[]4	[] 5 Totally competent
9. Reporting an unlawful act or conduct								
	Not competent	at all		[]1	[]2	[]3	[]4	[] 5 Totally competent
10.	10. Field sanitation and hygiene							
	Not competent	at all		[]1	[]2	[]3	[]4	[] 5 Totally competent
11.	DEPMEDS Se	tup						
	Not competent	at all	[]1	[]2	[]3	[]4	[]5	Totally competent

Section Three

Soldier and Survival Skills

1. Check the number that bes	st represent	s how fan	niliar you	are with th	ne M-16 r	ifle.		
Not familiar [] 1 [] 2 [] 3	[]4[]5	Totally fa	miliar					
2. Check the number that rep	resents hov	v familiar	you are v	vith the 9r	nm pistol			
Not familiar [] 1 [] 2 [] 3	[]4 []57	otally far	niliar					
3. How competent are you in	your abili	y to defer	nd yoursel	f and/or y	our patien	nt(s) if ca	alled upon to do so? (check the number)	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
4. 1 am competent and confident in y ability to protect myself and my patients using the M40 mask and MOPP gear. (check 1e number)								
Strongly disagree [] 1 [] 2	[]3[]4	[] 5 Stroi	ngly agree	:				
5. How competent are you in	your abili	y to navig	gate using	a map an	d compass	s? (check	the number)	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
6. How competent are you in	your abili	y to main	tain your	individual	weapon i	n worki	ng order? (check the number)	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
7. How competent are you in (check the number)	your abili	y to perfo	orm your p	orimary m	ilitary spe	cialty ur	nder adverse and/or prolonged field conditions?	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
8. How competent are you in equipment? (check the numb		y to deco	ntaminate	yourself a	and your p	oatients(s	s) using standard Army decontamination	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
9. Check the number that repenemy forces.	resents hov	v familiar	you are v	vith your s	status und	er the G	eneva Conventions should you be captured by	
Not competent	[]1		[]2	[]3	[]4	[]5	Totally competent	
10. If you were captured, how	w competer	nt are you	in your al	oility to re	sist the en	nemy? (C	Check the number)	
Not competent	[]1	[]2	[]3	[]4	[]5	Total	lly competent	
11. Check the number that represents your familiarity with standard Army communications equipment. (i.e. field radio)								
Not familiar [] 1 [] 2 [] 3	[]4[]5	Totally fa	miliar					

Section Four - A Personal and Physical Readiness

1. Check the box th [] <180	at most closely i	represents y [] 22		score. [] 241-269	[]270-300+			
2. Check the box w	hich represents l	how long ag	go it was that y	you had a dental exa	m.			
[] >24 mos,] >24 mos, [] 19-24 mos. [] 13-18 mos. [] 6 12 mos. [] <6mos.							
3. If indicated do yo	ou have a family	care plan?	[] Yes [] No	[] Not Applicable				
4. Do you have a ph	ysical profile? [[]Yes []No	,					
5. If yes to the above	e question, does	s your profil	le prevent, you	ı from completing y	our duty? []Yes [] No []Not Applicable			
			Sec	tion Four - B				
			Psycho	social Readines	s			
Family								
1. Check the number family)	er that best descr	ribes the qua	ality of your c	urrent family suppor	rt system. (i.e. family support group, friends o			
Poor	[]1 []	2 []3	[]4 []5	Excellent				
2. If you are deploy	ed, will the sam	e family su	pport system i	n the above question	be available? (check one)			
[]yes []no								
3. Have you ever be	en separated for	r more than	6 months from	n your family/signif	icant other? (check one)			
[]Yes []No								
4. If yes to the above	e question, desc	cribe your fa	amilies overall	response to your se	paration. (check the number)			
Poor	[]1 []	2 []3	[]4 []5	Excellent [] NA	A			
Legal								
Do you have a cu	rrent will?							
[]yes[]no	irone wiii.							
2. Do you have a cu	rrent power of a	attorney?						
[]yes []no	areas power or c							
3. Do you have any	pending legal n	natters, i.e.	divorce or oth	er legal problems?				
[]yes[]no				5 r				
et a constant of the constant								

[]4

[]5

Totally ready

[]3

[]1

[]2

Not ready at all

11. Weather extremes										
Not ready at all	[]1	[]2	[]3	[]4	[]5	Totally ready				
12. Long hours										
Not ready at all	[]1	[]2	[]3	[]4	[]5	Totally ready				
13. Lack of privacy										
Not ready at all	[]1	[]2	[]3	[]4	[]5	Totally ready				
Section Five										
Leadership and Administration Support										
Administration										
1. If you were deployed with a unit that you are not currently assigned or PROM to, you would understand the set up, functions, and all of the areas that fall under the command structure of the TOE unit. (check one)										
[] Strongly Agree [] Agree [] No	eutral [] Disag	ree [] Str	ongly Dis	agree						
2. If you are a single parent or dual military, IAW (in accordance with) AR 600-20, you are required to have a Family Care Plan. If you were called today and given notification that you were to deploy next week, how confident are you that you could activate and make your Family Care Plan work for the entire deployment (up to 9 months)? (check one)										
[] Totally confident [] Confident [] Somewhat confident [] Unsure that it would work for a long period of time (over 6 months). [] Unsure it would work as set up now. [] Not confident at all [] Not applicable; I am not a single parent or dual military										
Leadership										
1. Check the box that represents he described in the leader's principle:						wledge and concern for the soldiers as				
[] Very knowledgeable and concerned [] Somewhat knowledgeable and concerned [] Not knowledgeable and unconcerned, [] Not applicable										
2. Check the box that represents how you would rate your deployment unit first-line leader's acceptance of responsibility to ensure that safe, tough, realistic training was conducted which adhered to the highest standards, habits and discipline.										
[] High sense of responsibility [] Moderate sense of responsibility [] Low sense of responsibility [] Not applicable										
3. Check the box that represents how you rate your deployment unit first-line leader's ability to keep you informed.										
[] Leader keeps me very well informed [] Leader keeps me fairly well informed [] Leader does not keep me not informed at all [] Not applicable										

Section Six Group Integration and Identification

1. Check the number that represents your ability to adjust to crowded and coed sleeping quarters while deployed.								
Low ability to adjust	st []1 []2 []3 []4 []5 Hi	gh ability to adjust					
2. Check the box that represents the amount of days you have had the chance to train with your deployment unit in the last 12 months. (check one)								
[] None	[] 1 day	[] 2-6 days	[] 7-14 days	[] >14 days				
3. How familiar are you with your deployment unit's mission, vision, and values? (check one)								
[] Very Familiar [] Familiar [] Neither/Nor [] Somewhat Familiar [] Not Familiar at All								
4. How familiar are you with your role/duty assignment within your deployment unit? (check one)								
[] Very Familiar [] Familiar [] Neither/Nor [] Somewhat Familiar [] Not Familiar at All								

APPENDIX B Disclosure Letter

Army Nurse Readiness

Darnall Army Nurse,

You are invited to participate in a research study in Army Nurse Readiness conducted under the sponsorship of the Henry M. Jackson Foundation for the Advancement of Military Medicine. This research involves completing the enclosed Readiness Estimate and Deployability Index or READI. Completing the questionnaire takes about 30 minutes.

To maximize efficiency in the environment of today's high operational tempo, leaders need a way to measure readiness in Army Nurses before, during and after deployment. The READI is an innovative questionnaire, designed and tested by nurses, that assesses readiness in the following areas: 1) Clinical Nursing; 2) Operational Nursing; 3) Soldier Survival Skills; 4) Personal, Physical and Psychosocial Readiness; 5) Leadership and Administration Support; and 6) Group Integration and Identification. This research is an ongoing administration of the questionnaire to assess the readiness of a large group of nurses in a regional medical command.

It is important to the principal investigator that you know that your participation is voluntary. If you do choose to participate, you will be giving your consent by completing and returning the survey. You can rest assured that controls are in place to ensure that your participation remains completely confidential. Your name and address do not appear on the questionnaire

To take the READI simply answer the questions in each section. Please answer all the questions. You may use pencil or pen, and feel free to make comments or notes in the margins of the questionnaire booklet.

Please accept our thanks for contributing to the success of this research study. The results of the study will be available in early spring, 2002. If you have any questions about the study or would like information about the results please feel free to contact CPT Mark Morris, Principal Investigator at (254) 288-8600.

Sincerely,

MARK K. MORRIS CPT, MS Resident, Baylor HCA Program

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Table 1 Descriptive Statistics of Demographic Variables Administration of the Readiness (READI) Instrument

The Control of the Co	ME	EDCOM	Darnall Army Communit		
Hospital PROFIS Variables	n perc			percent	
Military Background					
Type unit *					
Fixed (TDA)	85	87.6	19	38	
Field (TO&E)	1	1.0	30	60	
Unknown	11	11.4	01	02	
Assignment					
Medical Command	97	100	33	66	
Forces Command			16	32	
US Army - Europe					
8 th Army – Korea					
US Army Reserve			01	02	
Other					
Military Rank					
2 nd Lieutenant	72	74.2	01	02	
1 st Lieutenant	1	1.0	07	14	
Captain	21	21.6	24	48	
Major	2	2.1	14	28	
Lieutenant Col	1	1.0	05	10	

Table 1 – cor Community I	atinued Hospital PROFIS	MEDO	MEDCOM		all Army
Variables		n	percent	n	percent
Gender					
	Female	64	66.0	33	66
	Male	33	34.0	17	34
Ethnicity					
	White	64	66.0	36	72
	Black	16	16.5	07	14
	Asian	5	5.2	02	04
	Hispanic	14	14.4	05	10
	Amer Indian	1	1.0	01	02
	Other	12	12.4	00	00
Nursi	ng background				
	Medical Surgical	78	80.4	18	36
	Nurse Anesthetist	-	-	03	06
	Critical Care Nurse	4	4.1	06	12
	Nurse Practitioner	3	3.1	06	12
	Emergency Nurse	3	3.1	03	06
	Perioperative Nurse	2	2.1	06	12
	Psychiatric Nurse	1	1.0	05	10
	OB-GYN	1	1.0	01	02
	Community Health	5	5.2	03	06

Table 1 – continued

Total years nursing experience **

Mean (years)	2.14	6.9
Standard Deviation	4.52	5.4

n = 97 MEDCOM non-PROFIS nurses and 50 Darnall Army Community Hospital

PROFIS/FORSCOM nurses

Note:* Types of Units: TDA=Table of Distributions/Allowance (fixed facilities),

TO&E = Table of Organization and Equipment (field type units)

^{**} Total years includes both civilian and military experience

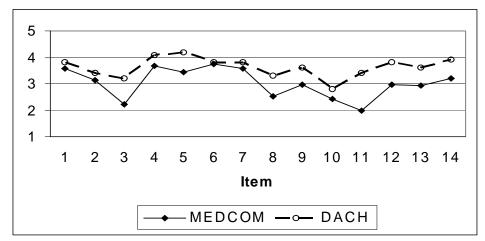
Table 2 Inferential Statistical Tests for Differences Between Means of Nurse Groups And Within Mean Ratings of Items For Three Dimensions of The READI Instrument

Effect Sources	SS	df	MS	F	p
I. Clinical Nursing Competency					
Between subjects	(2549.22)	(147)			
Nurse Group (G)	365.78	1	365.78	24.29	***
Residual between subjects	2183.44	146	15.06		
Within subjects	(3573.02)	(3822)			
k=27 Items (I)	780.55	26	30.02	41.96	***
Interaction G x I	95.10	26	3.66	5.11	***
Residual within subjects	2697.32	3779	.72		
Total	6122.24	3969			
II. Operational Nursing Competency					
Between subjects	(611.19)	(147)			
Nurse Group (G)	108.73	1	108.73	31.38	***
Residual between subjects	502.46	146	3.47		
•	(60674)	(725)			
Within subjects	(686.74)	(735)			
k=6 Items (I)	76.55	5	15.31	18.88	***
Interaction G x I	22.39	5	4.48	5.52	***
Residual within subjects	587.81	725	.81		
Total	1297.93	882			

Table 2 – continued

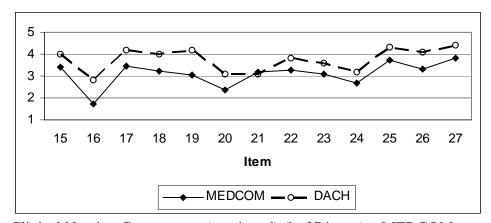
Effect Sources	SS	df	MS	F	p
III. Soldier and Survival Skills					
Between subjects	(762.19)	(147)			
Nurse Group (G)	3.52	1	3.52	.67	n/s
Residual between subjects	758.66	146	5.23		
Within subjects	(1091.48)	(1470)			
k=11 Items (I)	108.13	10	10.81	16.72	***
Interaction G x I	45.84	10	4.58	7.09	***
Residual within subjects	937.51	1450	.65		
Total	1853.67	1617			

Note: probability associated with F statistic comparisons, n/s not significant, ***p<.001



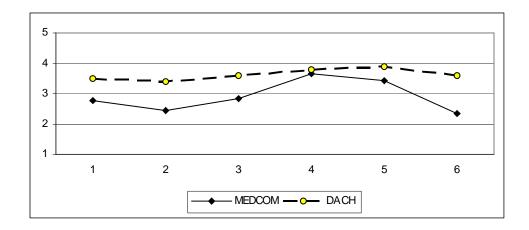
Section one: Clinical Nursing Competency (k=27 items) Army Community Hospital		MEDCOM		Darnall		
	Mean	S.D.	Mean	S.D.		
1 - Familiar with the different types of shock	3.6	3.6	3.9	1.1		
2 - Competent in caring for hemorrhagic shock	3.2	1.1	3.6	1.4		
3 - Competent in documenting in field environment	2.2	1.2	3.3	1.2		
4 - Competent in IV drip calculations	3.7	1.1	4.0	1.2		
5 - Competent in instituting standing orders	3.5	1.3	4.2	1.1		
6 - Understands and calculates body surface area burn patient	3.8	.8	3.8	1.0		
7 - Competence in deciding which patient is seen first	3.6	.9	4.0	.9		
8 - Competence in performing ACLS protocol	2.5	1.4	3.4	1.3		
9 - Competence in caring for life threatening injuries	3.0	1.1	3.7	1.1		
10 - Competence in caring for patient with NBC injuries	2.4	.1	2.9	.9		
11 - Competence in caring for patient with ballistic missile injuries	2.0	1.0	3.5	1.2		
12 - Competence in recognition of tension pneumothorax	3.0	1.3	3.9	1.2		
13 - Competence in providing fluid resuscitation of burn patient	2.9	1.1	3.4	1.2		
14 - Competence in using universal blood donor protocol	3.2	1.2	3.8	1.2		

Figure 1. Panoramic display depicting READI profiles and a statistical comparison of MEDCOM non-PROFIS and Darnall Army Community Hospital PROFIS nurses for self-reported clinical nursing competency (Items 1 through 14).



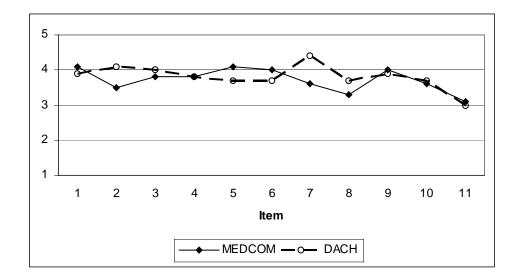
Section one: Clinical Nursing Competency (continued) (k=27 items) Army Community Hospital	MED	MEDCOM		Darnall		
	Mean	_S.D.	Mean	S.D.		
15 - Competence in caring for patients with disease and non-battle injury	3.4	1.1	4.0	1.0		
16 - Competence in using field ventilator	1.7	1.0	2.8	1.4		
17 - Competence in airway management	3.5	1.1	4.2	1.0		
18 - Competence in implementing triage categories	3.2	1.1	4.0	1.1		
19 - Competence in assuming clinical team leadership	3.0	1.2	4.2	1.0		
20 - Competence in caring for refugees	2.4	1.2	3.1	1.1		
21 - Competence in providing ante/post-partum care	3.2	1.3	3.1	1.3		
22 - Competence in field infection	3.3	1.1	3.8	1.0		
23 - Competence in orthopedic nursing	3.1	1.1	3.6	1.0		
24 - Competence in neurologic nursing	2.7	1.0	3.2	1.0		
25 - Able to identify components of physical exam	3.7	1.2	4.3	0.9		
26 - Able to list five examination techniques to perform physical exam	3.3	1.4	4.1	1.1		
27 - Able to perform a complete nursing assessment and interpret abnormal findings	3.8	1.0	4.4	0.7		

Figure 2. Panoramic display depicting READI profiles and a statistical comparison of MEDCOM non-PROFIS and Darnall Army Community Hospital PROFIS nurses for self-reported clinical nursing competency (Items 15 through 27).



Section two: Operational Nursing Competency (k=6 items) Army Community Hospital	MEDCOM		Darnall	
	Mean	<u>S.D.</u>	Mean	S.D.
1 - Competence in obtaining 12 lead EKG in given scenario	2.8	1.4	3.5	1.3
2 - Competence in evacuation procedures	2.5	1.0	3.4	1.0
3 - Competence in echelons of care operations	2.8	1.0	3.6	1.1
4 - Level of competency in reporting unlawful acts	3.6	0.9	3.8	1.0
5 - Competence in field sanitation	3.4	1.0	3.9	0.9
6 - Competence in DEPMEDS setup	2.3	1.4	3.6	1.1

Figure 3. Panoramic display depicting READI profiles and a statistical comparison of MEDCOM non-PROFIS and Darnall Army Community Hospital PROFIS nurses for self-reported operational nursing competency.



Section three: Soldier Survival skills (k=11 items) Army Community Hospital	MEDCOM		Darnall	
The second secon	Mean	S.D.	Mean	S.D.
1 - Familiarity with M-16 rifle	4.1	1.1	3.9	0.9
2 - Familiarity with 9mm pistol	3.5	1.1	4.1	0.8
3 - Competence in defending self and patient if called to do so	3.8	1.2	4.0	1.0
4 - Competence and confidence in protecting self with mask/MOPP	3.8	1.0	3.8	0.9
5 - Competence in ability to navigate using a map and compass	4.1	1.0	3.7	1.1
6 - Competence in ability to maintain weapon in working order	4.0	1.2	3.7	1.1
7 - Competence in ability to perform duties in adverse conditions	3.6	1.1	4.4	0.8
8 - Competence in ability to decontaminate self and patient using				
decontamination equipment	3.3	1.0	3.7	0.8
9 - Familiarity with status under Geneva Conventions	4.0	0.9	3.9	1.0
10 - Competence in ability to resist enemy if captured	3.6	1.0	3.7	1.0
11- Familiarity with standard Army communication equipment	3.1	1.2	3.0	0.9

Figure 4. Panoramic display depicting READI profiles and a statistical comparison of MEDCOM non-PROFIS and Darnall Army Community Hospital PROFIS nurses for self-reported soldier survival skills.